

41168 to 41243.

From Peru. Collected by Mr. O. F. Cook, of the Bureau of Plant Industry.
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41168 to 41176. *OXALIS TUBEROSA* Molina. Oxalidaceæ. Oca.

"A plant related to our common sheep sorrel, widely cultivated in Peru and Bolivia for the sake of its fleshy rootstocks, which are an important article of food. In some districts ocas are second only to potatoes, while in others ullucus are more important, or at least are sold more generally in the native markets. Ocas are eaten raw as well as cooked, and are also frozen and dried. Ocas prepared in this way are called *caya*, a term corresponding to *chuño* (*chunyo*), the name of the dried potatoes. Raw ocas when first dug have a distinctly acid taste, like sheep sorrel, but this is lost after the tubers have been exposed to the sun. The plant attains a height of 1 foot or more and has the general appearance of a large sheep sorrel. The flowers are yellow and the leaflets are folded at night or in wet weather, the same as sheep sorrel. The varieties are numerous, though much fewer than in the case of the potato. Some are preferred for eating raw and others for the making of *caya*. The texture of the tubers is very tender, crisp, and juicy. In form some are nearly cylindrical, while others are slender at the base and strongly thickened at the end. The colors vary from white or light pink through darker pinks or yellows to deep purplish red. The range of colors is much the same as in the *ullucu*, but no deep-yellow varieties were seen, nor any with spots, except that some have bands of deeper color across the eyes. In addition to the pleasing coloration, the surface of the tubers is smooth and clear, so that the general appearance is very attractive. If the taste should prove acceptable, ocas might become very popular for salads and pickles, if not for other purposes. The nature and habits of the plant indicate that it may be adapted to acid soils, which would be a distinct advantage in some parts of the United States."

Tubers.

41168. "No. 2021. Ollantaytambo, Peru, June 16, 1915. *Zapallo* oca. Pale yellow color of squash, with deep red bands across eyes; large specimens 8.5 cm. by 4 cm."
41169. "No. 1223. Ollantaytambo, Peru, June 16, 1915. *Higos* oca."
41170. "No. 2033. Sicuani (Ushcopata), Peru, April 9, 1915. Ten tubers in one hill."
41171. "No. 2026. Sicuani, Peru, April 4, 1915. *Hanccolema*. White variety, scarcely pinkish at the ends. More slender than the *papa* oca."
41172. "No. 2030. Sicuani, Peru, April 9, 1915. *Cachu* oca. Smaller and more slender than the others (*papa* oca, No. 2025, and *hanccolema*, No. 2026), and eyes not so close set. Pinkish all over, but much lighter than the preceding. Considered better for eating raw."
41173. "No. 2032. Sicuani (Ushcopata), Peru, April 9, 1915. *Yuracj* oca. At Ushcopata, a few miles above Sisuni, two more kinds of ocas were found, a reddish variety, smaller than *papa* oca, called *pocalluchu*, and a white variety, with very broad fasciated stems, called *yuracj* oca."